Synthesis of Monocrystal Luminophores          S/078/61/006/001/014/019
$Zn_2SiO_4$/Mn and (Zn, Be)$_2SiO_4$/Mn          B017/B054

the ИКС-51 (IKS-51) apparatus. The spectra show a maximum at 525 m$\mu$. For
(Zn,Be)$_2SiO_4$/Mn, the fluorescence maximum lies at 531 m$\mu$. The formation of
a solid solution was established by X-ray studies. Fig.2 shows the line
diagrams of monocrystals of (Zn,Be)$_2SiO_4$/Mn. Beryllium is isomorphously
incorporated in the crystal lattice of zinc silicate, and forms a solid
solution. There are 2 figures and 2 Soviet references.

ASSOCIATION:   Moskovekiy gosudarstvennyy universitet im. M. V. Lomonosova,
               Kafedra neorganicheskoy khimii (Moscow State University
               imeni M. V. Lomonosov, Department of Inorganic Chemistry).
               Institut mineralogii, geokhimii i kristallokhimii redkikh
               elementov Akademii nauk SSSR (Institute of Mineralogy,
               Geochemistry, and Crystallochemistry of Rare Elements of the
               Academy of Sciences USSR)

SUBMITTED:     June 10. 1960


Card 2/2

SOBLEV, B. P. *publishing Sobolev B.P.*

Dissertation defended for the degree of <u>Candidate of Geologo-Mineralogical Sciences</u> at the Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy in 1962:

"Role of Complex Fluoride Compounds in the Transfer and Concentration of Beryllium in High-Temperature Processes."

Vest. Akad. Nauk SSSR.     No. 4, Moscow, 1963, pages 119-145

BEUS, A.A.; SOBOLEV, B.P.; DIKOV, Yu.P.

Geochemical history of beryllium in the processes of high-
temperature postmagmatic mineral formations. Geokhimiia  no.3:
297-304  Mr  '63.                                      (MIRA 16:9)

1. Institute of Mineralogy, Geochemistry and Crystal Chemistry
of Rare Elements, Institute of Cristallography, Academy of
Sciences, U.S.S.R., Moscow.
          (Beryllium)  (Ore deposits)  (Geochemistry)

SOBOLEV, B.P.; PASHUTIN, V.P.

Fluoride transfer of beryllium in supercritical (vapor) solutions.
Trudy IMGRE no.18:44-48 '63.

Fluoride transfer of tantalum in supercritical (vapor) solutions.
Ibid.:49-52                                              (MIRA 16:12)

SOBOLEV, B.P.; MINEYEV, D.A.; PASHUTIN, V.P.

Low-temperature hexagonal modification of $NaYF_4$ with gagarinite structure. Dokl. AN SSSR 150 no.4:791-794 Je '63.
(MIRA 16:6)

1. Institut mineralogii, geokhimii i kristallokhimii redkikh elementov. Predstavleno akademikom N.V. Belovym.
(Minerals)

NOVOSELOVA, A.V.; ORLOVA, Yu.V.; SOBOLEV, B.P.; SIDOROV, L.N.

Mechanism of beryllium silicate ($Be_2 SiO_4$) formation. Dokl. AN SSSR 159 no.6:13__-__ D '64. (MIRA 18:1)

1. Moskovskiy gosudarstvennyy universitet. 2. Chlen-korrespondent AN SSSR (for Novoselova).
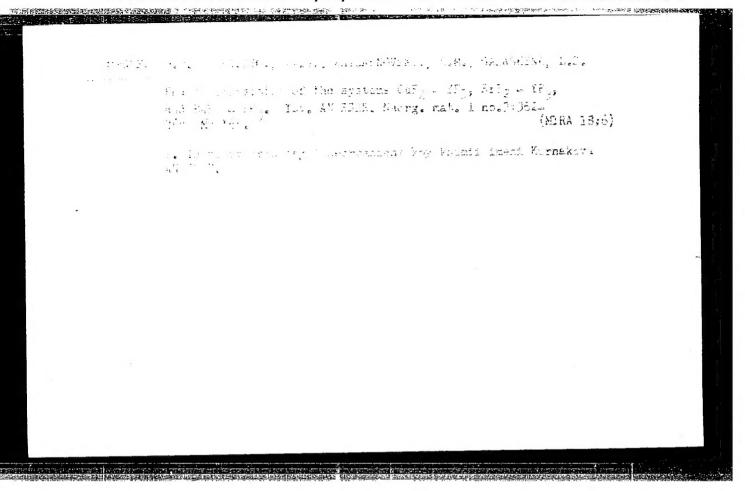
SOBOLEV, B. P.

Stability of the alkali elements of fluoberyllates in hydrothermal
solutions. Geol. rud. mestorozh. 6 no.3:16-23 My-Je '64
(MIRA 18:1)

1. Institut mineralogii, geokhimii i kristallokhimii redkikh
elementov AN SSSR, Moskva.

SOBOLEV, B.P.; DIKOV, Yu.P.

Metasomatic formations of beryl on the frontline of the
interaction of fluorine-bearing solutions with feldspars
according to experimental data.  Geol. rud. mestorozh. 6
no.5:72-78  S-O '64.                              (MIRA 17:12)

1. Institut mineralogii, geokhimii i kristallokhimii redkikh
elementov AN SSSR i Institut kristallografii AN SSSR, Moskva.

(MIRA 18;6)

L 36398-66    EWT(1)/EWT(m)/T/EWP(t)/ETI    IJP(c)    GG/JD

ACC NR: AP6018782                          SOURCE CODE:   UR/0070/66/011/003/0477/0478

AUTHOR: Novoselova, A. V.; Babin, V. N.; Sobolev, B. P.

ORG: Institute of Crystallography, AN SSSR (Institut kirstallografii AN SSSR)

TITLE: Growing sillimanite crystals in a transport chemical reaction

SOURCE: Kristallografiya, v. 11, no. 3, 1966, 477-478

TOPIC TAGS: crystal growth, fiber crystal, transport process, x ray photography

ABSTRACT:  A study was made of the conditions necessary to form sillimanite $Al_2SiO_5$ crystals in transport chemical reactions with the use of fluorine compounds.  The reagents were placed into quartz ampoules (18-20 mm in diameter) which were evacuated to about $10^{-2}$ mm Hg pressure and heated 5 to 10 hrs in a furnace having a hot zone variation of 1280° to 1150°C and a temperature gradient of 50°C within the zone.  Six different charges were made up, all containing $Al_2O_3$ and $SiO_2$, but varying in the use of fluorine compounds: $Na_3AlF_6$, $Li_2BeF_4$ or $AlF_3$ were 5% by wt.  In some cases, BeO and ZnO were used in the charge.  Sillimanite was only obtained in three of the tests and a picture was shown of the results; the crystals were 4 to 5 mm in length.  X-ray powder patterns of the sillimanite crystals were compared with those taken from the ASTM literature.  The relative merits of various transport agents were discussed and their characteristics in gaseous environments compared.  Orig. art. has: 2 figures, 1 table.

SUB CODE:  07/        SUBM DATE:  30May65/        ORIG REF:  004
                                                    UDC:   548.52

Card 1/1

SOBOLEV, B. V.

Rare complications in pleural puncture.  Probl. tuberk., Moskva
No. 3, May-June 50.  p. 67.

1.  Of the Lung Surgery Division (Head--B. V. Sobolev), Kalinin
Municipal Tuberclosis Hospital (Head Physician--K. V. Bogolepov).

CLML 19, 5, Nov., 1950

SOBOLEV, B. M., Cand Med Sci (diss) -- "Extrapleural pneumothorax and oleothorax under conditions of a regional antituberculosis dispensary". Moscow, 1957. 16 pp (Acad Med Sci), 200 copies (KL, No 13, 1960, 122)
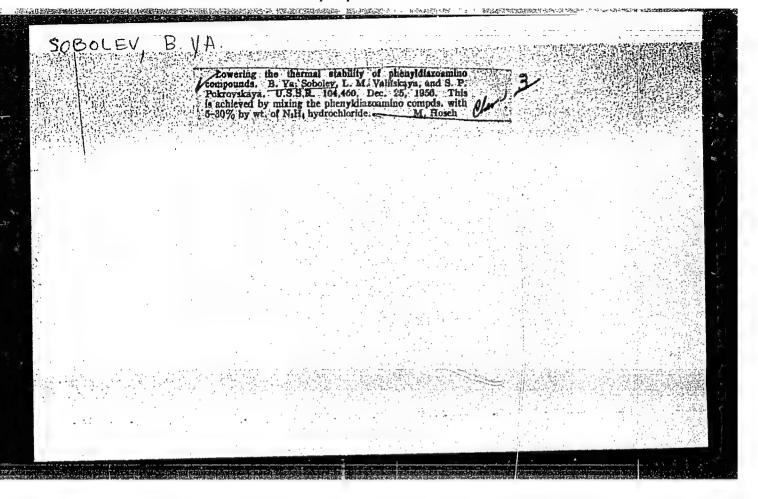
SOBOLEV, B.V. (Kalinin)

Case of extensive resection in partial obstruction of the
small intestine resulting from cicatrization of tuberculous ulcers.
Probl.tub. 35 no.1:97-99 '57.                              (MLRA 10:6)

1. Oblastnoy protivotuberkuleznyy dispanser.
        (TUBERCULOSIS, GASTROINTESTINAL, surg.
              extensive resection of small intestine in cicatrization
         of tuberc. ulcer (Rus))

SOBOLEV, B. YA.

Lowering the thermal stability of phenyldiazoamino compounds. B. Ya. Sobolev, L. M. Valiiskaya, and S. P. Pokroyskaya. U.S.S.R. 104,460, Dec. 25, 1956. This is achieved by mixing the phenyldiazoamino compds. with 5-30% by wt. of $N_3H_4$ hydrochloride. — M. Hoseh
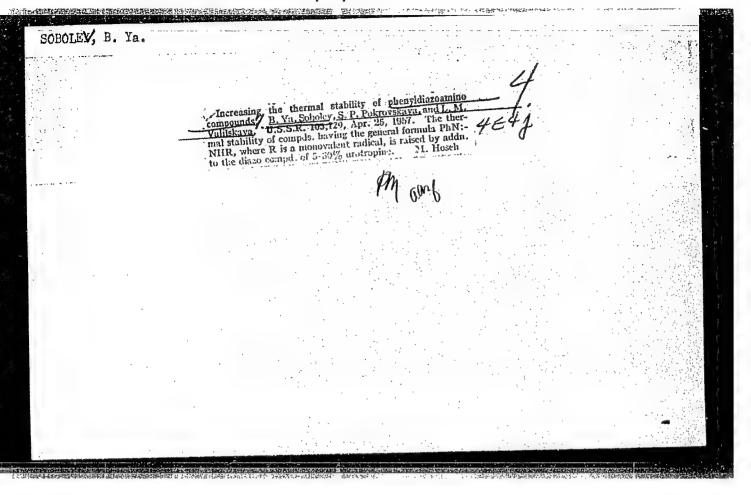
SOBOLEV, B.Ya., red.

[Instructions 205-56 for checking 36-I microwave dielectric-measuring devices] Instruktsiia 205-56 po poverke izmeritelei dielektrikov 3-santimetrovogo diapazona tipa 36-I. Izd. ofitsial'-noe. Moskva, 1957. 7 p.                                    (MIRA 14:5)

1. Russia(1923-    U.S.S.R) Komitet standartov, mer i izmeritel'-nykh priborov.
   (Dielectrics)                        (Microwave measurements)

SOBOLEV, B. Ya.

Increasing the thermal stability of phenyldiazoamino compounds. B. Ya. Soboley, S. P. Pokrovskaya, and L. M. Valiiskaya. U.S.S.R. 105,129, Apr. 25, 1957. The thermal stability of compds. having the general formula PhN:-NHR, where R is a monovalent radical, is raised by addn. to the diazo compd. of 5-50% urotropine.    M. Hosch

SOBOLEV, D.

Machine for making reed panels. Sel'.stroi. 11 no.8:20-21  Ag '56.
                                                    (MIRA 9:10)

1.Nachal'nik otdela organizatsii proizvodstva stroimaterialov Glav-
kolkhozstroya Ministerstva gorodskogo i sel'skogo stroitel'stva.
Kirgizskoy SSR.
        (Machine tools) (Rush work)

KONDRAT'YEV, Afanasiy Borisovich, kand.tekhn.nauk; YERSHOVA, Galina
Nikolayevna, inzh.; MEN'SHIKOV, Ivan Alekseyevich, prof., doktor
tekhn.nauk; MOSKOVSKIY, Mikhail Ivanovich, kand.tekhn.nauk;
SOBOLEV, David Iosifovich, kand.tekhn.nauk; SMIL'GEVICH, Petr
Kazimirovich, inzh.; SHIROKOV, Boris Ivanovich, kand.sel'sko-
khoz.nauk; Prinimali uchastiye: TREBIN, Boris Nikolayevich, inzh.;
OSOBOV, Vadim Izrailevich, inzh. BRIK, P.A., prepodavatel',
retsenzent; IVANOV, V.A., prepodavatel', retsenzent; KOGANOV, A.,
prepodavatel', retsenzent; KONONOV, B.V., prepodavatel', retsenzent;
MARKOV, G.Ya., prepodavatel', retsenzent; OSIPOV, G.P., prepoda-
vatel', retsenzent; RYABOV, P.I., prepodavatel', retsenzent;
SOLOV'YEV, K.Ya., prepodavatel', retsenzent; SOROKIN, V.Ya., pre-
podavatel', retsenzent; BANNIKOV, P., red.; VORONKOVA, Ye.,
tekhn.red.

[Manual for collective farm machinery operators] Spravochnik mekha-
nizatora sel'skogo khoziaistva. Penza. Penzenskoe knizhnoe izd-vo,
1959. 610 p.                                      (MIRA 14:2)

1. Saratovskiy institut mekhanizatsii sel'skogo khozyaystve imeni
M.I.Kalinina (for Brik, Ivanov, Koganov, Kononov, Markov, Osipov,
Ryabov, Solov'yev, Sorokin).
          (Agricultural machinery)    (Farm mechanization)

SOBOLEV, D.N., aspirant

Applying the variational method in calculating nonrectangular
rigid plates. Nauch.dokl.vys.shkoly; stroi. no.2:37-42  '58.
(MIRA 12:1)

(Elastic plates and shells)

SOBOLEV, D. N. Cand Tech Sci -- (diss) "Application of the V. Z. Vlasov variation method to the design of slanting and trapezoidal plates." Mos, 1959. 7 pp (Min of Higher and Secondary Specialized Education RSFSR. Mos Order of Labor Red Banner Construction Engineering Inst im V. V. Kuybyshev), 130 copies (KL, 45-59, 147)

-56-

SOBOLEV, D.N.

Using Professor V.Z.Vlasov's variational method in calculating thin trapezoidal plates. Nauch.dokl.vys.shkoly; stroi.  no.1: 19-26 '59.  (MIRA 12:10)

1. Rekomendovana kafedroy stroitel'noy mekhaniki Moskovskogo inzhenerno-stroitel'nogo instituta im. V.V.Kuybysheva.
(Elastic plates and shells)

S/535/60/000/130/006/007
E081/E335

25831

24.4200

AUTHOR:  Sobolev, D.N., Candidate of Technical Sciences

TITLE:  Transverse Bending of Oblique Plates with Two Clamped and Two Elastically Supported Edges

PERIODICAL:  Moscow.  Aviatsionnyy institut.  Trudy.  No. 130, 1960.  Prochnost' aviatsionnykh konstruktsiy, pp. 133 - 148

TEXT:  The paper is a continuation of previous work of the author (Ref. 3 - Nauchnyye doklady vysshey shkoly, Stroitel'stvo, 1958, No. 2;  Ref. 4 - Izvestiya vysshikh uchebnykh zavedeniy, Stroitel'stvo i arkhitektura, 1958, No. 6). The plate is shown in the figure;  the sides AB, CD are clamped and the plate is subjected to a uniformly distributed load  q . The deflection  w  of the plate is governed by the equation

$$\nabla^4 w = \frac{q}{D}, \text{ where } D = \frac{Eh^3}{12(1 - \nu^2)}$$ 

(1)

Card 1/5

S/535/60/000/130/006/007
E081/E335

25831

Transverse Bending ....

and is represented by the series:

(2) .

$$w(x, y) = \sum_{i=1}^{n} \varphi_i (x, y) X_i(x)$$

To satisfy the conditions at the clamped edges, a two-term approximation to Eq. (2) is taken:

(4) .

$$\varphi_1(x,y) = \left[(y+kx)^2 - b^2\right]^2;$$

$$\varphi_2(x,y) = \left[(y+kx)^2 - b^2\right]^2(y + kx)$$

This leads to an eighth-order differential equation with constant coefficients and the roots of the relevant characteristic equation are tabulated for angles of inclination

Card 2/5

25831

Transverse Bending ....

$\gamma$ of the plate of 0, 15, 30, 35, 40, 45 and 60°. The
functions $X_1$ and $X_2$ (Eq. 2) are expressed in terms of
the solution of the differential equation. The case of a
plate with $\gamma = 45°$, $b = \ell$ and Poisson's ratio $\nu = 0.3$
is considered in detail for the following conditions along
the edges AD, BC: 1) clamped; 2) hinged support;
3) elastic support; 4) free. The deflection at the centre
of the plate $[w(0, 0)]$, the moments at the centre
$[M_x(0,0); M_y(0,0)]$ and the moments at the point
$0,b[(M_x(0,b); M_y(0,b)]$ are calculated and tabulated
(Table 3) in terms of $10^{-5}$ $qb^4/D$ for the deflections and
$10^{-5}$ $qb^2$ for the moments:

Card 3/5

Transverse Bending .... 25831

S/535/60/000/130/006/007
E081/E335

| Method of Fixing Edges AD and Bc | $w(0,0)$ | $M_x(0,0)$ | $M_y(0,0)$ | $M_x(0,b)$ | $M_y(0,b)$ |
|---|---|---|---|---|---|
| Rigidly clamped | 842.614 | 5413.44 | 4691.15 | -8763.19 | -8763.19 |
| Hinged support | 900.285 | 5431.02 | 4906.344 | -9362.96 | -9362.96 |
| Elastic support | 900.460 | 5436.54 | 4908.64 | -9364.78 | -9364.78 |
| Edges AD and BC free | 1079.793 | 5168.79 | 5481.08 | 11229.85 | -11229.85 |

There are 3 figures, 3 tables and 4 Soviet references.

Card 4/5

LEONT'YEV, N.N., kand.tekhn.nauk; SOBOLEV, D.N., kand.tekhn.nauk

Approximate calculation of an arch dam for the effect of longitudinal
seismic loading. Gidr.stroi. 32 no.7:30-34 Jl '62. (MIRA 15:7)
(Dams)     (Earthquakes and building)

GOLOV, ... (Moscow)

"The application of the theory of random functions to the solution of some contact problems"

Report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow 29 Jan - 5 Feb 64.

SOBOLEV, D.P., kandidat tekhnicheskikh nauk;  CHEKAN, O.V., inzhener.

High-frequency radio-relay equipment for television transmission.
Vest.sviazi 16 no.5:7-8 My '56.                                    (MLRA 9:8)
    (Television broadcasting) (Radio relay systems)

SOBOLEV, D.S.

"Concerning the Physicochemical Basis for Selective Flotation of Copper, Lead, Zinc, and Iron Sulfides With the Use of Sodium Sulfide."  Sub 2 Apr 51, Moscow Inst of Nonferrous Metals and Gold imoni M. I. Kalinin

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

Sobolev, David Semenovich

PHASE I BOOK EXPLOITATION

220

Fishman, Mikhail Aleksandrovich and Sobolev, David Semenovich

Praktika obogashcheniya rud tsvetnykh i redkikh metallov;
I. Obogashcheniye polimetallicheskikh rud (Ore Concentration
Techniques for Non-ferrous and Rare Metals; I. Concentration of
Polymetallic Ores)

Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo literatury po
chernoy i tsvetnoy metallurgii, Moscow, 1957, 595 p., 4200 copies

Ed.: Troitskiy, A. V., Fishman, M. A.; Ed. of Publishing House:
Yezdokova, M. L.; Tech. Ed.: Evenson, I. M.

PURPOSE: This book is intended for engineers and technicians engaged
in ore concentration and for students specializing in the
concentration of ores.

Card 1/13

SOBOLEV, David Semenovich; FISHMAN, Mikhail Aleksandrovich; TROITSKIY,
A.V., otv.red.; YEZDAKOVA, M.L., red.izd-va; SHKLYAR, S.Ya.,
tekhn.red.; BOLDYREVA, Z.A., tekhn.red.

[Nonferrous and rare metal ore dressing practices] Praktika
obogashcheniia rud tsvetnykh i redkikh metallov. Pod red. A.V.
Troitskogo. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu
delu. Vol.2. [Dressing of copper ores] Obogashchenie mednykh
rud. 1960. 588 p.                                    (MIRA 14:1)
        (Ore dressing)        (Copper ores)

FISHMAN, Mikhail Aleksandrovich; SOBOLEV, David Semenovich; STRIGIN,
        I.A., retsenzent; TROITSKIY, A.V., red.; MAKRUSHINA, Ye.A.,
        red.izd-va; SHKLYAR, S.Ya., tekhn. red.; MINSKER, A.I.,
        tekhn. red.

        [Practices in nonferrous and rare metal ore dressing] Prak-
        tika obogashcheniia rud tsvetnykh i redkikh metallov. Pod
        red. A.V.Troitskogo. Moskva, Gosgortekhizdat. Vol.4. [Rare
        metal ore dressing] Obogashchenie rud redkikh metallov.
        1963. 712 p.                                (MIRA 16:8)
            (Ore dressing)  (Metals, Rare and minor)
                    (Rare-earth metals)

KOGAN, A.M.; SOBOLEV, D.Ya.

Resistance to wear of mine conveyers and cars made of plastics.
Plast.massy  no.3:37-47  '60.                    (MIRA 13:6)
   (Mining engineering--Equipment and supplies)
         (Plastics--Testing)

S/032/60/026/012/024/036
B020/B056

AUTHORS:      Perlin, S. M. and Sobolev, D. Ya.

TITLE:        Device for Determining the Coefficient of Sliding Friction

PERIODICAL:   Zavodskaya laboratoriya, 1960, Vol. 26, No. 12,
              pp. 1406-1408

TEXT:  The device suggested permits determination of the coefficient of
friction in the wearability test of plastic and other materials in the
case of dry friction, with water, with lubricants, and in the presence of
abrasive material. The coefficient of friction is determined by ascertain-
ing the friction torque produced in the pair of specimens tested, one of
which rotates with motor drive, whereas the other is firmly fastened to the
axis which is connected with the measuring part of the device. The device
consists of three main parts, viz., the operating, measuring, and damping
devices. By means of this device, the coefficients of sliding friction of
several pairs were determined. The friction losses in the device itself
are determined by the losses in the ball bearings during rotation of the
indicator and the blocks. Taring of the device is described. There are

Card 1/2

Device for Determining the Coefficient of          S/032/60/026/012/024/036
Sliding Friction                                    B020/B056

1 figure and 1 table.

ASSOCIATION:   Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-tekhnolo-
               gicheskiy institut ugol'nogo mashinostroyeniya
               (All-Union Scientific Research, Design, and Planning
               Technological Institute of Coal Machinery)

Card 2/2

S/653/61/000/000/023/051
I007/I242

AUTHORS: Kogan, A.M., and Sobolev, D.Ya.

TITLE: Some methods and results of evaluation of wear resistance of plastics in mining conveyors and cars

SOURCE: Plastmassy v mashinostroyenii i priborostroyenii. Pervaya resp. nauch.-tekh. konfer. po vopr. prim. plastmass v mashinostr. i priborostr., Kiev, 1959. Kiev, Gostekhizdat, 1961, 263-279

TEXT: In order to ensure optimum design data for the construction of plastic mining chutes and car bodies, investigations were carried out on the wear resistance of plastics to the abrasive action of coal particles. The tests were carried out on trapezoidal specimens on a special test stand designed so as to ensure, apart from the free movement of abrasive particles, their wedging between the scraper and the

Card 1/2

S/653/61/000/000/023/051
I007/I242

Some methods and results of evaluation...

test specimen to bring about shearing of the surface layers by abra-
sive particles. Polyamide-based plastics have a greater wear resis-
tance. Test results are tabulated and a formula for wear resistance
of plastics is derived. Polyurethane rubber, grain-oriented glass-
reinforced plastics, 68-type polyamide resin and plycaprone have grea-
test wear resistance. The above materials are more resistant to wet-
abrasion than grade 3 structural steel. Prestressed NSP-1 glass-rein-
forced plastics showed greater wear-resistance than grade 3 steel.
For mining conveyors transporting wet materials, the substitution of
plastics for grade 3 steel is desirable. Abrasion resistance of plas-
tics is not directly proportional to hardness; it depends, to a large
extent on a factor called "shear-initiation probability" which is
determined by the elasticity of the plastic material used. There are
9 figures and 7 tables.

Card 2/2

ACCESSION NR: AP4039948                    S/0191/64/000/006/0041/0044

AUTHOR: Vinogradov, V. N.; Shreyber, G. K.; Sobolev, D. Ya.

TITLE: Wear of fiberglass upon grinding with unmounted abrasive

SOURCE: Plasticheskiye massy*, no. 6, 1964, 41-44

TOPIC TAGS: fiberglass, wear resistance, polyester binder, phenolic binder, unfilled resin, glass mat, glass cloth, oriented glass fiber, filler affect, abrasion resistance

ABSTRACT: The wear resistance of fiberglass containing glass of different structures and polyester and phenol binders, when ground with unmounted abrasive, was compared. The test stand was arranged so that the abrasive particles falling between two surfaces moving with respect to each other, were wedged therebetween and caused microabrasions. Fiberglass made of BF-4 binder was more wearresistant than fiberglass of analgous structure prepared from polyester resin PN-1. The unfilled resins had the least wear resistance. Of the glassfilled materials the fiberglass made of glass cloth was the least wear-resistant, followed closely by glass mat in which the wear was very uneven. Oriented glass fibers offered the

Card 1/2

ACCESSION NR: AP4039948

greatest resistance, especially when the fiber was oriented in the direction of the motion of the abrasive. Photographs of the different ground surfaces are given. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 000

Card   2/2

SOBOLEV, Dmitriy Zakharovich; PLICHE, V.O., red.; NAZAROVA, A.S.,
tekhn. red.

[In the land of legends] V kraiu legend. Moskva, Izd-vo
"Znanie," 1961.  79 p.                    (MIRA 15:2)

1. Sekretar' Taymyrskogo okruzhnogo komiteta Kommunistiche-
skoy partii Sovetskogo Soyuza (for Sobolev).
    (Taymyr peninsula—Economic conditions)
    (Taymyr Peninsula—Nationalities)

SOBOLEV, Dmitriy Zakharovich; AMLIN, V.I., red.

[Putting Lenin's plan for the electrification of the
country into practice] Osushchestvlenie leninskogo plana
elektrifikatsii strany. Moskva, Mysl', 1965.  77 p.
(MIRA 18:8)

SOBOLEV, E. A.

23366    Vliyaniye Merserizatsii Na Fiziko-Mekhanicheskiye Pokazateli Pryazhi
Legkaya Prom-st', 1949, No. 7, c. 15-17

SO:   LETOPIS NO. 31, 1949

*SOBOLEV, E. A.*

SOBOLEV, E.A., redaktor; MOGILEVSKIY, I.Ya., retsenzent; SHTEYNER, L.M.,
retsenzent. ABRAMOV, S.A., retsenzent; BELYAYEVA, Z.F., redaktor;
MOLODOV, I.V., redaktor; VILLENEVA, A.V., tekhnicheskiy redaktor

[The knit goods industry abroad; collection of articles translated
from foreign periodicals] Trikotazhnaia promyshlennost' za rubezhom;
sbornik perevodov statei iz inostrannoi periodicheskoi literatury.
Moskva, Izd-vo inostrannoi lit-ry, 1954. 179 p.          (MLRA 8:4)
          (Knit goods industry)

IVANOV, V.A., inzhener; SOBOLEV, E.A., inzhener

More efficient utilization of raw materials in the knit goods
industry. Leg. prom 15 no.4:17-21 Ap '55.     (MLRA 8:7)
          (Knit goods industry)

IVANOV, V.A.; SOBOLEV, E.A.

For further technological progress in the knit goods industry.
Leg.prom.15 no.10:4-7  O '55.                           (MLRA 9:1)
          (Knit goods industry)

SOBOLEV, E., uchenyy sekretar' sektsii.

In the Technical Council.  Leg.prom. 16 no.4:44 Ap '56.(MLRA 9:8)
(Knit goods industry)

GUSEV, M.N.; SOBOLEV, E.A.

Knit good industry during the sixth five-year plan. Leg.prom. 16
no.10:4-6 O '56.                                            (MIRA 10:12)
                              (Knit goods industry)

SOBOLEV, E.A.

Further specialization in the knit goods industries. Leg.prom.
16 no.12:4-6 D '56.                                    (MLRA 10:2)
              (Knit goods industry)

SOBOLEV, E.A.; MOGILEVSKIY, I.Ya.

[Knit goods industry during the years of the Soviet regime]
Trikotazhnaia promyshlennost' za gody sovetskoi vlasti.
Moskva, Biuro tekhnicheskoi informatsii legkoi promyshlennosti,
1957.   46 p.                                         (MIRA 12:6)
            (Knit goods industry)

ABRAMOV, Sergey Aleksandrovich; MELIKHOV, S.A., dotsent, retsenzent; SOBOLEV,
E.A., inzhener, retsenzent; GUSEV, V.P., inzhener, retsenzent;
PLEMYANNIKOV, M.N., redaktor; KOGAN, V.V., tekhnicheskiy redaktor

[Finishing of knit goods] Otdelka trikotazhnykh izdelii. Moskva,
Gos.nauchno-tekhn.izd-vo M-va legkoi promyshl. SSSR, 1957. 370 p.
            (Knit goods)                              (MIRA 10:10)

SOBOLEV, E.A.

Soviet knit goods industry. Leg.prom. 17 no.11:44-50 N '57.

(MIRA 10:12)

(Knit goods industry)

SOBOLEV, E.

In the Scientific and Technical Society of the Light Industry.
Leg. prom. 18 no.9:10-11 S '58.                    (MIRA 11:10)

1. Nauchnyy rukovoditel' sektsii trikotazhnoy promyshlennosti
tsentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva legkoy
promyshlennosti.
                   (Knit good industry)

SOBOLEV, E.A.,inzh.

Scientific and technical conference of workers in the sewing
and knitting industries. Tekst.prom. 19  no.2:75  F '59.
(MIRA 12:5)

(Clothing industry)

SOBOLEV, E.A.

Inspection of new knitted goods. Tekst.prom. 19  no.10:93-94
O  '59.                                        (MIRA 13:1)

1. Nauchnyy rukovoditel' sektsii trikotazhnoy promyshlennosti
TSentralnogo pravleniya Nauchno-tekhnicheskogo obshchestva legkoy
promyshlennosti.
                (Knit goods)

RABINOVICH, Zelik Yefimovich, inzh.; Prinyali uchastiye: BUTOVICH, V.M.,
    inzh.; LUPANDIN, K.K., inzh.-ekonom.; FEDOROV, V.I., inzh.;
    CHETYRKINA, Ye.N.,prepodavatel'nitsa; SOBOLEV, E.A., nauchn.red.;
    KRASNOBORODSKAYA, L.L., red.; BOGATOVA, V.N., red.-leksikograf;
    YURCHENKO, D.I., red.-leksikograf; BRUDNO, K.F., tekhn. red.

[English-russian textile dictionary] Anglo-russkii tekstil'nyi
slovar'. Izd.2., perer. i dop.  Pod red. K.K.Lupandina.  Moskva,
Glav. red. inostr. nauchno-tekhn. slovarei Fizmatgiza, 1961.
640 p.                                                (MIRA 14:8)

1. Moskovskiy tekstil'nyy institut (for Chetyrkina).
              (Textile industry--Dictionaries)
              (English language--Dictionaries--Russian)

SOBOLEV, E.A.; POGOSOV, V.M.

> Seminar on the exchange of advanced practices by knit goods
> enterprises.  Tekst.prom. 21 no.11:94-95 N '61.   (MIRA 14:11)
>
> 1.  Nauchnyy rukovoditel' sektsii trikotazhnoy promyshlennosti
> TSentral'nogo pravleniya nauchno-tekhnicheskogo obshchestva
> legkoy promyshlennosti (for Sobolev).  2.  Direktor TSentral'nogo
> instituta nauchno-tekhnicheskoy informatsii legkoy promyshlennosti
> (TSINTIlegproma) (for Pogosov).
> (Knit goods industry)

SOBOLEV, E.A.

Efficient utilization of raw materials in the knit goods industry.
Tekst.prom. no.2:25-28 F '63.                                    (MIRA 16:4)

1. Nauchnyy rukovoditel' sektsii trikotazhnoy promyshlennosti TSentral'-
nogo pravleniya Nauchno-tekhnicheskogo obshchestva legkoy promyshlennosti.
                          (Knit goods industry)

SOBOLEV, E. A.

Seminar for the exchange of practices for the improvement of
the quality and expansion of the assortment of knit goods.
Tekst. prom. 23 no.3:55-57 Mr '63.          (MIRA 16:4)

1. Nauchnyy rukovoditel' sektsii trikotazhnoy promyshlennosti
TSentral'nogo pravleniya Nauchno-tekhnicheskogo obshchestva
legkoy promyshlennosti.

(Knit goods industry)

SOBOLEV, E.A.

All-Union scientific and technical seminar on the exchange of
practices for an efficient utilization of raw materials in the
manufacture of knit underwear.  Tekst. prom. 25 no.4:38-39
Ap '65.                                        (MIRA 18:5)

1. Nauchnyy rukovoditel' sektsii trikotazhnoy promyshlennosti
TSentral'nogo pravleniya Nauchno-issledovatel'skogo obshchestva
legkoy promyshlennosti.

SOBOLEV, E.M.

Investigating trolley frames of traveling cranes. Trudy LPI
no 254:68-80 '65.                                              (MIRA 19:1)

ACC NR: AP7000371     ( N )    SOURCE CODE: UR/0413/66/000/022/01 /0158

INVENTOR: Varenov, P. G.; Sobolev, F. P.; Sidorova, I. V.

ORG: None

TITLE: Nozzle for a ship's screw.  Class 65, No. 188856

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 158

TOPIC TAGS: nozzle design, marine engineering, SHIP COMPONENT

ABSTRACT: This Author's Certificate introduces a nozzle for a ship's screw.  The unit includes external and internal surfaces interconnected by reinforcing ribs.  To reduce disturbing forces transmitted from the screw to the hull, the internal surface of the nozzle is mounted on shock absorbers in the region of the screw disc.

UDC: 629.1.037.23

Card  1/2                                        0930 .   3684

SOBOLEV, F.

Role of absorbed air in soil structure, and its determination. F. B. SOBOLEV AND M. V. CHAPEK. *Nauch. Agron. Zhur.* 1930, No. 1, 3-21.—Methods of "aggregate" analysis are examd., and the effects of moisture and absorbed air on the disintegration of aggregates discussed. Among soils of different types, variations in capacity for absorbed air were of the same order as variations in the satn. capacity for bases. H. C. A.

METALLURGICAL LITERATURE CLASSIFICATION

Comparison of methods for determining the fertilizer requirements of a soil. F. S. Sobolev. *Udobrenie i Urozhai* 1931, 904-0; *Chem. Zentr.* 1932, 1, 2573 (. The vegetation method of Mitscherlich (sugar beets) is not suitable for detn. of N requirements, but is very useful for detn. of $P_2O_5$ requirements. Of the methods tested for detg. N requirements, that of Wachsmann (a 15-day period is used) was the best field or growing method. The best results for $P_2O_5$ requirements were obtained with the methods of Arrhenius and of Mitscherlich, much poorer results with the method of Lemmermann and that of soly. curves. There is without doubt correlation between the values by the 4 methods and results of out-growing expts. If growing expts. with sugar beets are included, the correlation between values by the agricultural chem. and biochem. methods decreases.

M. G. Moore

Amounts of basic fertilizers in the cultivation of sugar
beets. technique of their use. I. S. Sobolev and V. P.
Belskii. *Chemization Socialist. Agr.* (U.S.S.R.) 8,
No. 3, 38-48 (1939); *Chimie & industrie* 43, 215; cf.
C. A. 32, 3071. Application of 20 tons per ha. of
manure and 30-50 kg. per ha. of N-P-K fertilizer considerably improved the yield of sugar beet, raising it to 440 q.
per ha. The whole, increasing the amt. of manure to 60 tons per ha.
did not produce any greater effect, but increasing the
amt. of each of the mineral fertilizers to 110-130 kg. per
ha. was accompanied in most cases by a considerable increase in both crop yield and sugar content. Above
120 kg. per ha. the effect of the mineral fertilizers became a....

SOBOLEV E.

CA

PROCESSES AND PROPERTIES INDEX

Half century of work of D. N. Pryanishnikov. P. S. Bobko. — J. Applied Chem. (U. S. S. R.) 12, 310-21 (1939). — Biography with a portrait. A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SOBOLEV, F. S.

CA

15

The fertilizer scheme in sugar beet rotations. F. S. Sobolev. *Chemisation Socialistic Agr.* (U. S. S. R.) 10, No. 4, 3-10(1941); *Chem. Zentr.* 1941, II, 2880).—The use of manure and mineral fertilizers in fertilizing sugar beets, grains and perennial grasses, and the use of raw phosphate, lime and gypsum are discussed. Various systems for applying the fertilizer in the course of the rotation are presented.

O. W. Willcox

SOBOLEV, F. S.

Sobolev, F. S. - "Fertilization in the system of drought-control measures,"
Vestnik Mosk. un-ta, 1949, No. 11, p. 165-75 --- Bibliog:
p. 174-75

So: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)

VOL'FKOVICH, S. I., ACHLEY, E. J.

Agricultural Chemistry

Thoughts and works of D. I. Mendeleev on agriculture and the application of chemistry to it. Vest. Mosk. un. no. 6, 1952.

9.  Monthly List of Russian Accessions, Library of Congress, ___December___ 195$_2$ Uncl.

So po/ev, F. S.

USSR/Miscellaneous

FD-1698

Card 1/1      :  Pub. 129-23/25

Author        :  Sobolev, F. S., Docent

Title         :  Experience gained in the cinefication of lecture courses

Periodical    :  Vest. Mosk. un., Ser. fizikomat. i yest. nauk, Vol. 10, 186-187, Feb 1955
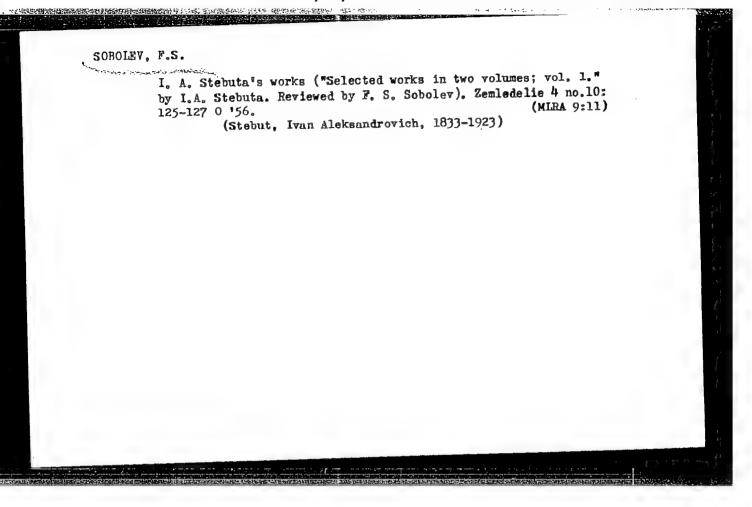
Abstract      :  The Chair of Agronomy in Moscow University was the first in the present
shcool year to present lecture courses on film.  Demonstrated on film
were a course of lectures on crop raising, a special course entitled
"Cultivation of Crops" (occurrence, geography and systematics of culti-
vated plants), and the course "General Farming".  Director of the Chair
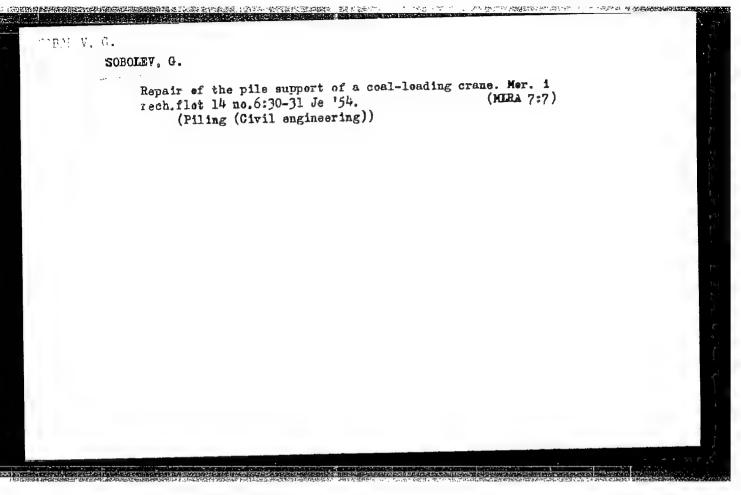of Agronomy is Prof. V. T. Makarov.  In parts of the courses there are
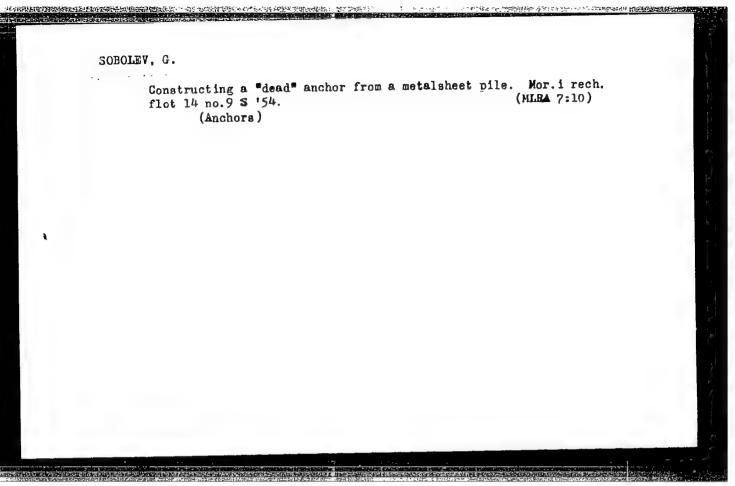no special film demonstrations.

Institution   :

Submitted     :

SOBOLEV, F.S.

I. A. Stebuta's works ("Selected works in two volumes; vol. 1."
by I.A. Stebuta. Reviewed by F. S. Sobolev). Zemledelie 4 no.10:
125-127 O '56.                                                (MLRA 9:11)
            (Stebut, Ivan Aleksandrovich, 1833-1923)

BY V. G.

SOBOLEV, G.

Repair of the pile support of a coal-loading crane. Mor. i
rech.flot 14 no.6:30-31 Je '54.                    (MIRA 7:7)
          (Piling (Civil engineering))

SOBOLEV, G.

Constructing a "dead" anchor from a metalsheet pile. Mor.i rech.
flot 14 no.9 S '54.                                    (MLRA 7:10)
        (Anchors)

SOBOLEV, G.

New construction of piles and of mooring structures. Mor. i rech.
flot 14 no.11:30-31 N '54.                                    (MLRA 7:11)

1. Glavnyy inzhener Leningradskogo morskogo porta.
        (Piling (Civil engineering))

ANDREYEV, Georgiy Borisovich, inzh.; VOLOBUYEV, Viktor Mikhaylovich,
    inzh.; GORYUNOV, Boris Fedorovich, doktor tekhn.nauk,prof.;
    SMIRNOV, Nikolay Andreyevich, kand.tekhn.nauk; SOBOLEV,
    Georgiy Aleksandrovich, inzh.; Prinimali uchastiye: ANNENKOV,
    Ye.N., inzh.; ZLATOVERKHNIKOV, L.F., kand.tekhn.nauk;
    KORCHAGINA, A.Ya., inzh.; KRIVITSKIY, S.I., inzh.; RUMYANTSEV,
    A.N., inzh.; LAPINA, Z.D., red.; MOSHAROVA, T.P., red.;
    TIKHONOVA, Ye.A., tekhn. red.

[Technical operation of hydraulic engineering structures in
harbors]Tekhnicheskaia ekspluatatsiia portovykh gidrotekhni-
cheskikh sooruzhenii. [By] G.B.Andreev i dr. Moskva, Izd-vo
"Morskoi transport," 1962.  375 p.              (MIRA 15:8)
    (Hydraulic structures)       (Harbors)

SCHMIDT, G. A.

Technology

Working principles, installation, repair, and adjustment of machines for the flax-spinning industry. Moskva. Gos. nauchno-tekhn. izd-vo legkoi promyshl., 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1952 1953, Uncl.
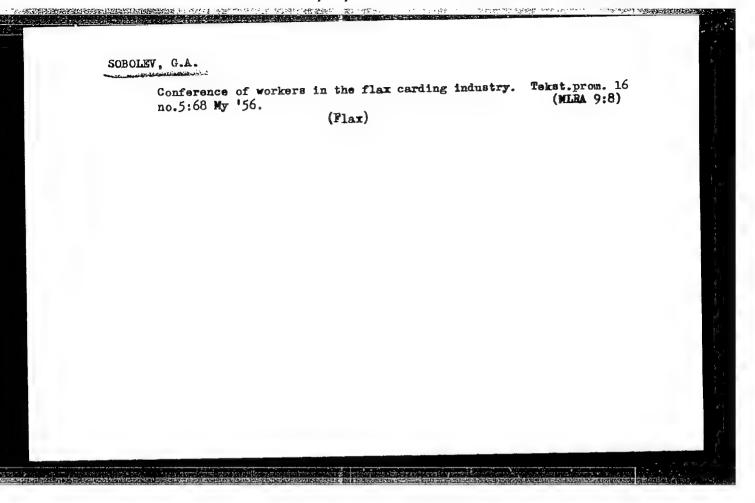
SOBOLEV, G.A.; TARASOV, S.V., retsenzent.

[Working principles, assembly, repair, and adjustment of flax-spinning
machines for wet spinning] Ustroistvo, montazh, remont i naladka l'no-
priadil'nykh mashin sistemy mokrogo priadeniia. Moskva, Gos. nauchno-
tekhn. izd-vo Ministerstva promyshlennykh tovarov shirokogo potrebleniia
SSSR, 1953. 170 p.                                                        (MLRA 7:6)
        (Spinning machinery)

SOBOLEV, Gleb Alekseyevich; TARASOV, S.V., retsenzent; GUSEVA, Ye.M.,
redaktor; MEDVEDEVA, L.A., tekhnicheskiy redaktor

[Structure and servicing of carding machines in linen manufacturing]
Ustroistvo i obsluzhivanie chesal'nykh mashin l'nianoi promyshlen-
nosti. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva legkoi pro-
myshl. SSSR, 1956. 136 p.                                (MLRA 9:11)
        (Carding machines)

SOBOLEV, G.A.

Conference of workers in the flax carding industry.   Tekst.prom. 16
no.5:68 My '56.                                          (MLRA 9:8)
                              (Flax)

GINZBURG, Lev Natanovich, professor, doktor tekhnicheskikh nauk; SAL'MAN,
Semen Il'ich, kandidat tekhnicheskikh nauk; TARASOV, Sergey
Vladimirovich, kandidat tekhnicheskikh nauk; LAZAREVA, Sof'ya
Yefremovna, kandidat tekhnicheskikh nauk; FRIDMAN, Boris Nikolayevich,
kandidat tekhnicheskikh nauk; LIFSHITS, Israil' Yakovlevich,
inzhener; SOBOLEV, G.A., retsenzent; SOKOLOVA, V.Ya., redaktor;
MEDVEDEV, L.Ya., tekhnicheskiy redaktor

[Handbook on flax spinning] Spravochnik po priadeniiu l'na. Pod red.
L.N.Ginzburga. Moskva, Gos.nauchno-tekhn.izd-vo M-va legkoi promyshl.
SSSR, 1957. 667 p.                                    (MLRA 10:8)

1. Moscow. TSentral'nyy nauchno-issledovatel'skiy institut
promyshlennosti lubyanykh volokon.
        (Linen)     (Spinning)

MAKHNOVETSKAYA, R.B., starshiy nauchnyy sotrudnik; SOBOLEV, G.A.;
TIMOSHOV, V.A.

Using the VAKT-3 apparatus for dyeing "lavsan" polyester
fibers. Tekst.prom. 23 no.1:65-68 Ja '63.   (MIRA 16:2)

1.  TSentral'nogo nauchno-issledovatel'skogo instituta shelkovoy
promyshlennosti (TSNIIShelka) (for Makhnovetskaya).
2.  Nachal'nik krasil'nogo tsekha kombinata imeni Shcherbakova
(for Sobolev). 3.  Krasil'nyy tsekh kombinata imeni
Shcherbakova (for Timoshov).
                (Dyes and dyeing--Apparatus)
                (Textile fibers, Synthetic)

S/0044/64/000/004/B124/B124

ACCESSION NR: AR4039846

SOURCE: Ref. zh. Matematika, Abs. 4B552

AUTHOR: Klokachev, I. V.; Sobolev, G. A.

TITLE: A standard program for the numerical integration of a system of first-order ordinary differential equations by the Runge-Kutta method, with automatic selection of steps, for the BESM-2 computer.

CITED SOURCE: Sb. Resheniye inz. zadach na elektron. vy* chisl, mashinakh, L., 1963, 44-56

TOPIC TAGS: numerical integration, differential equation, ordinary differential equation, first order differential equation, Runge Kutta method, computer

TRANSLATION: The paper presents a program intended for the numerical integration, on a given interval $[x_0, X]$, of a system of ordinary differential equations of the form $y_i = f_i(x, y_1, \ldots, Y_n)$ $i = 1, 2, \ldots, n$, with initial conditions $y_i(x_0) = y_{10}$, by the fourth-order Runge-Kutta formulas. The integration is performed with automatic selection of the step, the magnitude of which is modified by the program depending

Card   1/2

ACCESSION NR: AR4039846

on the behavior of the solution obtained, in such a way that at each point of the
interval of integration, the step might be maximum for the given allowable error.
The constructed program is a standard one:  it may be included into any working
program, and arbitrary programs may also be included into it.  The program allows
several schemes of integration and output of the results.  The choice of points for
which the results are printed out allows one to obtain the solution at the end-
point X of the integration interval $[x_0, X]$; at all points at which the integra-
tion step is increased; at any points generated according to a rule, which may be
arbitrary, specified in advance by the programmer (output at constant intervals,
given table of output points, etc...)  If desired, the initial data may also be
printed out.  The program may be used with a compiling and interpreting system.  It
occupies $(0527)_8$ memory cells, is self-resetting, and has a series of $[sub-program]$
blocks.  Bibliography, with 5 titles.  I. Shelikhova
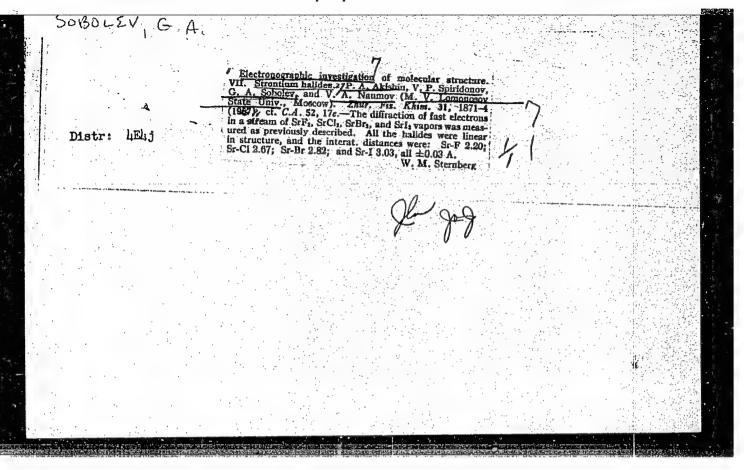
DATE ACQ: 15May64          SUB CODE: MA, DP              ENCL: 00

Card 2/2

SOKOLOV, Glet Alekseyevich; TARASOV, S.V., kand. tekhn. nauk,
dotsent; VERBITSKAYA, Ye.N., red.

[Arrangement, maintenance, repair and adjustment of spred-
ing, drawing and roving machines in the flax industry]
Ustroistvo, obsluzhivanie, remont i naladka raskladochnykh,
rostochnykh i rovnichnykh mashin l'nianoi promyshlennosti.
Moskva, Legkaia industriia, 1965. 174 p.     (MIRA 18:10)

SOBOLEV, G. A.

Distr: 4E1j

Electronographic investigation of molecular structure. VII. Strontium halides. P. A. Akishin, V. P. Spiridonov, G. A. Sobolev, and V. A. Naumov (M. V. Lomonosov State Univ., Moscow). Zhur. Fis. Khim. 31, 1871-4 (1957); cf. C.A. 52, 17e.—The diffraction of fast electrons in a stream of $SrF_2$, $SrCl_2$, $SrBr_2$, and $SrI_2$ vapors was measured as previously described. All the halides were linear in structure, and the interat. distances were: Sr-F 2.20; Sr-Cl 2.67; Sr-Br 2.82; and Sr-I 3.03, all ±0.03 A.

W. M. Sternberg

76-1-8/32

AUTHORS:     Akishin, P. A.,   Spiridonov, V. P.,
             Sobolev, G. A.,   Naumov, V. A.

TITLE:       Studies of Molecular Structure by Electron Diffraction.
             VIII. Barium Halides (Elektronograficheskoye issledovaniye
             stroyeniya molekul.   VIII. Galogenidy bariya).

PERIODICAL:  Zhurnal Fizicheskoy Khimii, 1958, Vol. 32, Nr 1, pp. 58-61
             (USSR)

ABSTRACT:    For the first time the hitherto in literature lacking data
             on the configuration and the geometric parameters of the
             molecules of all vaporous halides of barium are obtained.
             That is to say of barium fluoride, barium chloride and barium
             iodide. The taking of electronograms was carried out by means
             of an apparatus with an evaporator for high temperatures
             according to the method used by the authors of earlier works
             (ref. 1 to 6). The evaluation of electronograms was carried
             out according to two methods: the radial distribution according
             to the variant of Volter-Bich and that of consecutive
             approximations. With the evaluation according to the second
             method the authors established that the distribution of the
             intensity of stray electrons of the barium halide vapors,
Card 1/3     observed experimentally is well represented by the theoretical

Studies of Molecular Structure by Electron Diffraction.    76-1-9/32
VIII. Barium Halides

intensity curves $I(s)$ (which had been calculated on the
condition of a linear configuration of the barium halide
molecules). The asymmetry of the rings on the electronograms
of barium halide vapors is less marked than with those of the
corresponding halides of calcium and strontium (ref. 5,6).
Because of the greater charge value of the barium nucleus
compared with the charges of calcium- and strontium nuclei,
the valence angle in the molecules of barium halides
according to the method of consecutive approximation can be
determined only less exact than with the molecules of
halides of calcium and strontium.- In the case of all
compounds investigated a linear molecular structure was
stated and the values of the intermolecular distances were
found. The error in the determination of these distances
Ba- X is $\pm 1$- 1,5 %. The authors stated that the interatomic
distance Ba-X in chloride-, bromide- and iodide molecules
changes approximatively according to the linear law in
dependence on the ordinal number of the halide, while the
distance Ba-F deviates strongly from this regularity.

Card 2/3

Studies of Molecular Structure by Electron Diffraction.    76-1-8/32
VIII. Barium Halides

There are 2 figures, 5 tables, and 7 references, 6 of which
are Slavic.

ASSOCIATION: Moscow State University imeni M. V. Lomonosov
(Moskovskiy gosudarstvennyy universitet im. M. V.
Lomonosova).

SUBMITTED:    September 12, 1956

AVAILABLE:    Library of Congress

Card 3/3

AUTHORS:        Akishin, P. A., Spiridonov, V. P., Sobolev, G. A.     20-118-6-24/43

TITLE:          Electron Diffraction Investigation of the Structure of
                Beryllium Halide Molecules (Elektronograficheskoye issledovan-
                iye stroyeniya molekul galogenidov berilliya)

ABSTRACT:       The present paper investigates the structure of the vaporous
                beryllium halides - of fluoride, chloride, bromide, and iodide
                for which no data exist in publications on the geometrical
                parameters. The production processes for the individual pre-
                parations are shortly enumerated. The apparatus and the
                measuring methods for the detection of electronographs were
                described already earlier (Ref. 1). For all vaporous
                beryllium halides investigated here 8 - 10 series of electrono-
                graphs each were taken. These electronographs had the
                following intensity distribution: the even (2., 4., 8., and
                10.) maxima are intensive and the uneven (3., 5., 7., and
                9.) have a lower intensity than the even maxima. The in-
                tensity of the even and uneven maxima decreases gradually
Card 1/3        with increasing scattering angle. The minima lying before

Electron Diffraction Investigation of the Structure of        20-118-6-24/43
Beryllium Halide Molecules

Card 2/3

the even and uneven maxima, respectively, are deep and not
deep, respectively. The electronographs were exploited here
with the method of the radial distribution and then with the
method of successive approximations. The curves of the radial
distribution $r^2 D(r)$ of the molecules of all beryllium
molecules investigated here have two distinctly marked peaks
each of which can be interpreted in a natural way as the
distances $r(Be - X)$ and $r(X - X)$. Other peaks did not exist.
Thus the data obtained by means of the method of radial
distribution obviously prove that the electronographs of the
vapors of the beryllium halides correspond to the linear
triatomic molecules $BeX_2$. A diagram illustrates the theoreti-
cal curves of the intensity of the scattered $BeX_2$-molecules
which well describe all characteristic peculiarities of the
electronographs of the vapors of the beryllium halides. The
results of the computations are compiled according to the
method of successive approximation. The author suggests
three types for the structure of the beryllium halides,
among them an octahedral type. The two methods used here
for the exploitation of the electronographs yield

Electron Diffraction Investigation of the Structure of     20-118-6-24/43
Beryllium Halide Molecules

        agreeing results on the configuration (i.e. in favor of the
linear structure) and on the geometrical parameters of the
molecules of the vaporous beryllium halides. There are 2
figures, 5 tables, and 14 references, 8 of which are Soviet.

ASSOCIATION:  Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

PRESENTED:  August 2, 1957, by N. N. Semenov, Member, Academy of Sciences,
USSR

SUBMITTED:  July 30, 1957

Card 3/3

3(9)

SOV/2o-128-3-25/58

AUTHORS:     Volarovich, M. P.,  Parkhomenko, E. I.,  Sobolev, G. A.

TITLE:      Investigation of the Piezoelectric Effect of Quartz-bearing
            Rocks in the Open Air

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 3, pp 525-528
            (USSR)

ABSTRACT:    The authors first mention previous articles dealing with
            the above subject. They investigated bare quartzites and
            gneisses near the cities of Kyshtym and Karabash, Central
            Ural, and also granite gneisses of the faulted zone on the
            Irtysh river, East Kazakhstan. The experiments were made
            for the purpose of determining the pure piezoelectric effect
            of the above rocks in massive strata. Electric oscillations
            resulting from the piezoelectric effect are excited due to
            the propagation of elastic waves throughout quartzite-bearing
            rock. The waves were produced by a steam ram. The measuring
            instruments used by the authors featured several channels
            and permitted simultaneous recording of electric and elastic
            oscillations. Each channel was composed of a signal receiver,
            an amplifier, and a galvanometer. The authors measured the

Card 1/3

SOV/2o-128-3-25/58

Investigation of the Piezoelectric Effect of Quartz-bearing Rocks in the
Open Air

potential difference between the movable electrode fastened
to the profile and the grounded electrode fastened outside
the quartz-bearing massif. The electrodes and seismographs
were placed side by side on the rock surface. The seismic
and electric oscillations resulting from the shock were simul-
taneously recorded on-one oscillogram. In the investigations
carried out in Ural, a piezoelectric effect of quartzites
and gneisses was recorded at distances of up to 6 m from the
point of the shock. Electric oscillations were recorded at
various distances from this point. In measurements on fre-
quencies of 350 cycles, the absolute value of the recorded
electric signals was 1,000 $\mu v$  1.5 m far from the point of
the shock, and $\sim$ 500 $\mu v$ at a distance of 6 m. At 1,000 cycles,
electric oscillations were weaker by one order. Granite
gneisses of Kazakhstan permitted observation of piezoelectric
oscillations over a distance of 40 m. Electric signals were
recorded some time after the shock, e.e. just when the elastic
pulse  reached the point of reception. Thus, the piezoelectric
effect was recorded that had been produced within the electrode
Card 2/3      range. To gather additional data on the piezoelectric effect

SOV/2o-128-3-25/58

Investigation of the Piezoelectric Effect of Quartz-bearing Rocks in the Open Air

of the rocks investigated in the open air, the piezoelectric moduli were measured also in a laboratory. The results are similar to those obtained from measurements in the open air. A. G. Ivanov (Ref 4) observed current pulses during mechanical shocks. Theoretical investigations were carried out by A. V. Shubnikov (Ref 1). There are 2 figures and 6 Soviet references.

ASSOCIATION: Institut fiziki Zemli im. O. Yu. Shmidta Akademii nauk SSSR (Institute for Physics of the Earth imeni O. Yu. Shmidt of the Academy of Sciences, USSR)

PRESENTED: May 25, 1959, by A. V. Shubnikov, Academician

SUBMITTED: May 19, 1959

Card 3/3

VOLAROVICH, M.P.; SOBOLEV, G.A.; PARKHOMENKO, E.I.

Piezoelectric effect of pegmatite and quartz veins. Izv. AN
SSSR. Ser. geofiz. no.2:145-152 F '62.        (MIRA 15:2)

1. AN SSSR, Institut fiziki Zemli.
                (Piezoelectricity)
                (Quartz)
                (Pegmatites)

SOBOLEV, G.A.; SHCHERBAKOV, A.M.; AKISHIN, P.A.

Rotational spectrum and dipole moment of the vinylacetylene
molecule.  Opt. i spektr. 12 no.1:147 Ja '62.        (MIRA 15:2)
(Butenyne—Dipole moments)
(Butenyne—Spectra)

SOBOLEV, G.A.

Some calculations of fields for the piezoelectric prospecting
method. Izv. AN SSSR. Ser. geofiz. no.3:378-385  Mr '64.
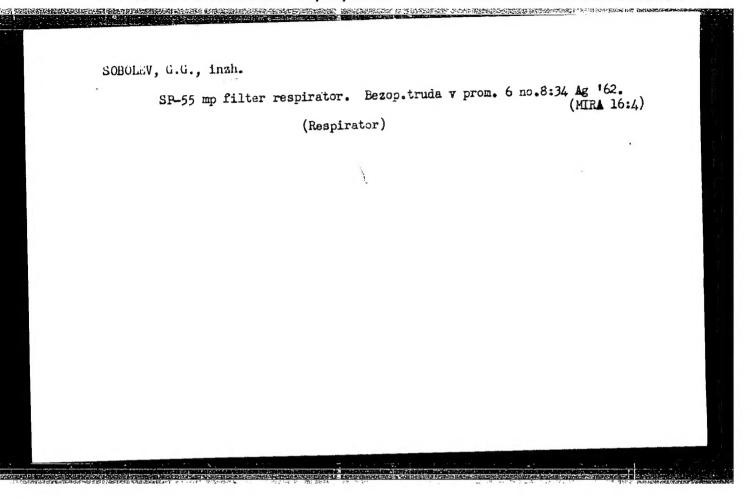
(MIRA 17:3)

1. Institut fiziki Zemli AN SSSR.

POLARDVICH, M.P.; SIMKIN, B.A.

Use of the piezoelectric effect of rocks for underground studies of
piezoelectric bodies. Fiz.1, AN SSSR 167 no.3:556-558  My '65.
(MIRA 18:7)

1. Institut fiziki Zemli im. O.Yu. Shmidta AN SSSR. Submitted
November 17, 1964.

SOBOLEV, G.G., inzh.

SP-55 mp filter respirator. Bezop.truda v prom. 6 no.8:34 Ag '62.
(MIRA 16:4)

(Respirator)

BABOKIN, I.A., redaktor; BALBACHAN, Ya.I, redaktor; BARABANOV, F.A.,
redaktor; BUCHNEV, V.K., redaktor; VLADIMIRSKIY, V.V., redaktor;
GRIGOR'YEV, S. Ye., redaktor; DOKUKIN, A.V., redaktor; ZHABO, V.V.
redaktor; ZADEMIDKO, A.N., redaktor; ZAITSEV, A.P., redaktor;
IL'ICHEV, A.S., redaktor; KAGAN, V.Ya., redaktor; KRASNIKOVSKIY,
G.V., redaktor; KRASOZOV, I.P., redaktor; KRIVONOGOV, K.K.,
redaktor; LALAYANTS, A.M., redaktor; MOGILEVSKIY, N.M., redaktor;
ONIKA, D.G., redaktor; OSTROVSKIY, S.B., redaktor; OSTROVSKIY,
S.M., redaktor; PEYSAKHOVICH, G.I., redaktor; POCHENKOV, K.I.,
redaktor; SIRYACHENKO, F.N.;redaktor. SKOCHINSKIY,A.A., redaktor;
STUGAREV, A.S., redaktor; SKORKIN, K.I.; SKURAT, V.K., redaktor;
SOBOLEV, G.G., redaktor ;TERPITOREV, A.M., redaktor; KHUDOCOVTSEV,
N.M., redaktor; TSYPKIN, V.S., redaktor; SHEVYAKOV, L.D., redaktor;
SHELKOV, A.A., redaktor;ANDREYEV, G.G., tekhnicheskiy redaktor.

[Safety rules in coal and shale mines] Pravila bezopasnosti v
ugol'nykh i slantsevykh shakhtakh. Moskva, Ugletekhizdat, 1951.
207 p.                                      (MLRA 9:1)

1. Russia (1923- U.S.S.R) Ministerstva ugol'noy promyshlennosti.
    (Coal mines and mining-Safety measures)

SOBOLEV, G.G., inzhener.

[Organization of mine rescue work] Organizatsiia gornospasatel'nykh rabot
v shakhtakh. Moskva, Ugletekhizdat, 1952.  149 p.               (MLRA 6:5)
                                                   (Mine rescue work)